

WINDING RESTRAINT ON WOUND ROTOR GENERATORS OR MOTORS AND METHOD FOR FORMING THE SAME

ABSTRACT OF THE DISCLOSURE

An electric machine and method for forming the same comprises a rotor, a rotor winding disposed on the rotor and having a body portion and end turn portions, and a non-metallic cylinder arranged around the rotor to restrain both the body portion and the end turn portions of the winding against forces resulting from a rotation of the rotor. No portion of an inner circumference of the cylinder is smaller than an outer circumference of the rotor so that the cylinder may be slid around the rotor without obstruction during construction of the electric machine. The cylinder surrounds a body portion of the rotor and extends axially beyond end faces of the rotor and has a plurality of holes defined therethrough. The rotor includes a plurality of venting passages and at least one opening formed therein to allow a balance plug to be engaged therein.